

In the Claims

1. (Currently Amended) A ferritic stainless steel for a proton-exchange membrane fuel cell separator, having a composition comprising 0.03 mass % or less of C, 16-45 mass % of Cr, 0.03 mass % or less of N, 0.1-5.0 mass % of Mo, Al: 0.001-0.2 mass % or less, wherein a total of the C content and the N content satisfies 0.03 mass % or less; a balance portion is comprised of Fe and unavoidable impurities with a contact resistance of $10 \text{ m}\Omega \cdot \text{cm}^2$ or lower, and having a passive film on a surface of the stainless steel with an atomic ratio of Cr/Fe which is 1 or greater and an atomic ratio of Al/(Cr+Fe) which is less than 0.10.

2. (Currently Amended) A ferritic stainless steel for a proton-exchange membrane fuel cell separator, having a composition comprising 0.03 mass % or less of C, 0.03 mass % or less of N, 20-45 mass % of Cr, and 0.1-5.0 mass % of Mo, Al: 0.001-0.2 mass % or less, wherein a total of the C content and the N content satisfies 0.03 mass % or less; a balance portion is comprised of Fe and unavoidable impurities with a contact resistance of $10 \text{ m}\Omega \cdot \text{cm}^2$ or lower, and having a passive film on a surface of the stainless steel with an atomic ratio of Cr/Fe which is 1 or greater and an atomic ratio of Al/(Cr+Fe) which is less than 0.05.

3. (Currently Amended) The ferritic stainless steel according to claim 1, wherein the stainless steel further comprises at least one selected from a group of items (1) - (4):

(1) Si: 1.0 mass % or less;

(2) Mn: 1.0 mass % or less; and

(3) Al: 0.001-0.2 mass % or less; and

(4) (3) Ti or Nb: 0.01-0.5 mass %; or a total of Ti and Nb: 0.01-0.5 mass %.

4. (Currently Amended) The ferritic stainless steel according to claim 1, wherein the passive film has an atomic ratio of O(M) / O(H) between an oxygen O(M) present in the state of

a metal oxide and an oxygen O(H) present in the state of a metal hydroxide is 0.9 or less.

5. (Currently Amended) The ferritic stainless steel according to claim 1, wherein the Cr content is 20 to 45 mass %.

6. (Cancelled)

7. (Currently Amended) The ferritic stainless according to claim 2, wherein the stainless steel further comprises at least one selected from a group of items (1)-(4):

(1) Si: 1.0 mass % or less;

(2) Mn: 1.0 mass % or less; and

~~(3) Al: 0.001-0.2 mass % or less; and~~

~~(4)~~ (3) Ti or Nb: 0.01-0.5 mass %; or a total of Ti and Nb: 0.01-0.5 mass %.

8. (Currently Amended) The ferritic stainless according to claim 2, wherein the passive film has an atomic ratio of O(M) / O(H) between an oxygen O(M) present in the state of a metal oxide and an oxygen O(H) present in the state of a metal hydroxide is 0.9 or less.

9. (Currently Amended) The ferritic stainless steel according to claim 3, wherein the passive film has an atomic ratio of O(M) / O(H) between an oxygen O(M) present in the state of a metal oxide and an oxygen O(H) present in the state of a metal hydroxide is 0.9 or less.

10. (Currently Amended) The ferritic stainless steel according to claim 7, wherein the passive film has an atomic ratio of O(M)/O(H) between an oxygen O(M) present in the state of a metal oxide and an oxygen O(H) present in the state of a metal hydroxide is 0.9 or less.

11. (Currently Amended) The ferritic stainless steel according to claim 3, wherein the Cr content is 20 to 45 mass %.

12. (Currently Amended) The ferritic stainless steel according to claim 4, wherein the Cr content is 20 to 45 mass %.

13. (Currently Amended) The ferritic stainless steel according to claim 7, wherein the Cr content is ~~[[20]]~~ 22 to ~~[[45]]~~ 35 mass %.

14. (Currently Amended) The ferritic stainless steel according to claim 8, wherein the Cr content is ~~[[20]]~~ 22 to ~~[[45]]~~ 35 mass %.

15. (Currently Amended) The ferritic stainless steel according to claim 9, wherein the Cr content is 20 to 45 mass %.

16. (Currently Amended) The ferritic stainless steel according to claim 10, wherein the Cr content is ~~[[20]]~~ 22 to ~~[[45]]~~ 35 mass %.

17-31. (Cancelled)